

Appl. No. : 09/965,968
Filed : September 26, 2001

AMENDMENTS TO THE CLAIMS

IN THE CLAIMS:

A complete set of claims is provided below.

1.-9. (Canceled)

10. (Withdrawn) An anti-alteration system for homepage, comprising:

a public-web-server computer retaining the safe-web-files encrypted from a usual web file which includes non-executable files and at a user browser side computer executable file;

a CGI Gateway module for sending a request information to a CGI Gateway means, wherein when said public-web-server computer gets said request information from a user browser to executes a CGI (Common Gateway Interface) program, said request information is a URL format including IP address, comment and parameters, however said public-web-server does not execute said CGI program before doing generation process, send said request information to said CGI Gateway module only; and

a send request information to original-web-server means, in which at said CGI Gateway module, said request information is modified automatically to a new request that is received by said original-web-server and sent to said original-web-server which comprises;

means for using said modified request information got from said CGI Gateway module, executing CGI program in said original-web-server computer,

means for sending a http header and CGI output contents from said CGI program to said CGI Gateway at said public-web-server computer; and

means for sending a CGI output from said CGI Gateway module to a user's browser passing through a public-web-server or directly.

11. (Withdrawn) An anti-alteration system for homepage, as recited in claim 10, wherein chaos encryption technology is used to do encryption/decryption.

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12. (Withdrawn) An anti-alteration system for homepage, as recited in claim 10, wherein said real time check technique uses a message authentication technology using chaos theory.

13. (Previously presented) An anti-alteration system for web-content, comprising:

a public-web-server configured to store safe-web-files encrypted from original web-content including one or more types of static files and one or more types of dynamic files, and configured to provide HTTP web server functions;

a private-web-server configured to store said original web-content, said private-web-server provided to said public-web-server through a firewall;

wherein when a web visitor's request is received, said public-web-server is configured to verify that said safe-web-file has not been improperly altered, deleted or replaced, said public-web-server further configured to decrypt one or more of said safe-web-files and respond to said visitor; and

said public-web-server further configured to automatically send a recovery request to said private-web-server when said public-web-server detects an unauthorized alteration of said safe-web-files, said private-web-server, in response to said recovery request, configured to create new safe-web-files by encrypting one or more files of said original-web-content and send said new safe-web-files to said public server through said firewall.

14. (Previously presented) The anti-alteration system, as recited in Claim 13, wherein said encryption comprises chaos encryption technology to do encryption and decryption of said web-content for increasing the web server response speed and increasing security strong of whole system.

15. (Previously presented) The anti-alteration system, as recited in Claim 13, further comprising a real-time-check module used on said public-web-server computer for linking to a decryption module, wherein said decryption module is configured to decrypt one or more of said safe-web-files in response to an HTTP request received from said web visitor.

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16. (Previously presented) The anti-alteration system as recited in Claim 15, further comprising a real-time-check module configured to use a symmetric-key encryption to decrypt one or more of said safe-web-files when said web visitor's request is received.

17. (Previously presented) The anti-alteration system, as recited in Claim 16, wherein said symmetric-key encryption is selected from a group consisting essentially of DES, 3DES and AES.

18. (Previously presented) An anti-alteration system for web-content, comprising:

a public-web-server configured to store safe-web-contents that have been provided with header information including a MAC (Message Authentication Code) generated from said original web-content, and properties of said original-web-content including, name, size, date, and location thereof;

a private-web-server configured to store said original web-content said public-web-server provided to said private-web-server through a firewall;

said private-web-server configured to separate said header information from a requested safe-web-file , and using said MAC (Message Authentication Code) included in said header information to check an authenticity of said safe-web-file; and

said public-web-server configured to add new header information to said original web-content to create a new safe-web-file on said private-web-server computer when an unauthorized alteration of said safe-web-file is detected, wherein said new safe-web-file is sent to said public-web-server computer to automatically restore said altered safe-web-file.

19. (Previously presented) The anti-alteration system, as recited in Claim 18, further comprising a real-time-check module used on said public-web-server computer for linking to an authentication module, wherein said authentication module is configured to provide authentication of said safe-web-file in response to a request received from said web visitor though http protocol.

20. (Previously presented) The anti-alteration system, as recited in Claim 19, wherein said real-time-check module uses a message authentication technology using chaos theory to check whether the safe-web-content has been altered.

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21. (Previously presented) The anti-alteration system, as recited in Claim 18, wherein said real-time-check module that is configured to link said public-web-server services by using at least one message authentication technology selected from a group consisting essentially of MD4, MD5, and SHA.

22. (Previously presented) An anti-alteration system for web-content, comprising:
a public-web-server computer, configured to store safe-web-files which have been encrypted from original web-contents and have been provided with header information, said header information including a MAC (Message Authentication Code) generated from authentication checking said original web-content and properties including name, size, date, and storage location thereof;
a private-web-server computer which retains said original web-content and which is provided to said public-web-server computer through a firewall;
a real-time-check module, in response to a web visitor's request safe-web file, said real-time-check module configured to separate said header information from said safe-web-file and using a MAC (Message Authentication Code) included in said header information to authenticate said safe-web-file by comparing said header information with;
separate header information; and
a recovery module, when an unauthorized alteration of said safe-web-file is detected, said recovery module configured to encrypt said original web-content and add header information to said original web-content to create a new safe-web-file on said private-web-server computer, sending said new safe-web-file to said public-web-server computer to automatically restore said safe-web-file which has been altered.

23. (Previously presented) The anti-alteration system, as recited in Claim 22, wherein said recovery module uses chaos encryption technology to do encryption and decryption.

24. (Previously presented) The anti-alteration system, as recited in Claim 22, wherein said real-time-check module is configured to provide authentication of said safe-web-file in response to a request received from said web visitor through http protocol.

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25. (Previously presented) The anti-alteration system, as recited in Claim 23, wherein said real-time-check is configured to use a symmetric-key encryption to decrypt said safe-web-contents in response to said web visitor's request.

26. (Previously presented) The anti-alteration system, recited in Claim 25, wherein said symmetric-key encryption is selected from a group consisting essentially of DES, 3DES, RC4 and AES.

27. (Previously presented) The anti-alteration system, as recited in Claim 24, wherein said real-time-check module uses a message authentication technology using chaos theory to check whether the safe-web-content has been altered.

28. (Previously presented) The anti-alteration system, as recited in Claim 24, wherein said real-time-check module uses at least one of MD4, MD5, and SHA for message authentication.